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The Physical Growth of Rochester

By BLAKE McKELVEY

The new buildings which have sprung up on all sides of the city during the last few years are but the latest manifestations of the pulsating physical growth that has animated Rochester for more than a century. The present activity has some of the characteristics of a building boom, but it is not likely to develop the intensity of the boom experienced here in the early 1900's when Rochester ranked for nearly a decade among the first cities in America in building operations. Today, several western and southern cities are the real boom towns, but if we go back far enough in the city's history, to the 1820's that is, we come to a period when Rochester was not only the most striking but also the first example of the new American phenomenon—the boom town.

Rochester has in fact, like most other cities, grown by fits and starts, with periods of rapid construction and expansion interspersed by periods of less active development, which sometimes tapered off into seasons of stagnation. Curiously enough, these periods did not always coincide exactly either with the waves of population growth or with the rise and fall of economic prosperity. All three cycles were of course related, but many other factors exerted an influence: the coming of the canal and the railroads; the establishment and later development of the transit system; the intervention of wars and fires; the provision of water and sewer systems, of gas and electric and telephone facilities; the paving of streets and highways; the coming of automobiles, radios, and now television sets. Financial policies, interest rates on mortgages, building materials and practices, labor costs and wage levels among consumers—all exerted an influence on both the rate and the character of Rochester's physical growth.

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Geographic factors played their part, too, contributing to the dynamics of the situation and helping to determine the community's successive patterns as well as its natural environment. Various degrees of individual and group planning were present from the start; but perhaps least influential of all were the conscious architectural tastes of the builders, though at times these were sufficiently strong to give a special tone to specific areas. Finally the aging and in some cases the decay of older areas, and the uneven manner in which they were sometimes neglected and sometimes replaced by new buildings with new functions, helped to keep Rochester's facade in constant change.

The American city, as an observant traveler has said, never looks finished, and perhaps Rochester has never appeared more unfinished than it does today. Certainly it has had happier days, when its structures enhanced rather than obliterated a fine natural setting, winning admiration from all visitors. Perhaps in this day of self-conscious civic planning a review of the stages of our physical growth will aid us to a fuller realization of the present opportunities.

The Village Pattern

One of the first points to keep in mind is that Rochester, like most other communities of that day, was conceived and laid out as a village. Its founders in 1812 had no reason to suppose that within a century it would double the size of New York (100,775 in 1810) and double it again in the next fifty years—cities had never grown that fast before! Like the founders of other ambitious settlements, Colonel Rochester naturally hoped to see his town exceed others in the area. The site's advantages included an accessible waterfall, the Genesee to bring the produce of a rapidly settling valley to its mills, and a not-to-difficult portage to Lake Ontario with its great trade potentialities. Some of Colonel Rochester's partners in the development of the hundred-acre tract on the west bank at the small upper falls feared that the promoters of the higher and dryer east bank would steal the lead, or that the settlement at the main falls a third of a mile nearer the lake would gain precedence. Colonel Rochester, however, was confident that the site was sufficient for the development of a town that would encompass all three tracts and eventually surpass Canandaigua and other established villages in western New York.

It was with these prospects in mind that he surveyed the town site in 1811. A main highway, appropriately called Buffalo Street, was staked out leading west from the bridge which was then under construction

near the ford below the small upper falls. A natural race, branching from the river above these falls, returned to it above the bridge, and this area was designated for improvement as a milling center. West of the mill lots, a second principal street was laid out (like the other, six rods wide) named Mill Street. From its intersection with Buffalo Street it continued northward as Carroll Street, soon renamed State Street, following a forest highway which skirted the main falls and led on to the landing below the lower falls several miles beyond.

A southern rather than New England inspiration appeared in the generous provision for these highways, and in the gridiron pattern for the other streets, as well as in the absence of a public common. Quarter-acre lots were offered for sale on the two business streets, at \$50 each, except for the choice northwest lot at the Four Corners, which was priced at \$200. Quarter- and half-acre lots on the back or residential streets (each four rods wide) were listed at \$30, but \$5 down payments secured the lots to prospective buyers who built a house or shop 20 x 16 feet in size during 1812. One large lot, an acre in size, was reserved on the south side of Buffalo Street a short distance west of the Four Corners for the court house, while sites were designated for a school and a church nearby.

The completion of the crude frame bridge at the present Main Street crossing and the building of several log huts and boarded shanties were the principal accomplishments of that first year. These beginnings on the hundred-acre tract were assisted by the construction of Enos Stone's sawmill on the east bank and the opening of Francis Brown's gristmill at the main falls. Indeed the Brown brothers, who were laying out a two-hundred-acre plot adjoining Rochester's tract on the north, were not fully resigned to accepting the latter's priority. They adopted an independent street plan centering around a large public square which was intersected by a street significantly named Court Street! Frankfort, as it was called, looked on paper like a separate and rival village, but fortunately the two street plans were brought into reasonable harmony by a slight shifting of lot lines. If both groups of west side promoters were looking ahead to the time when a new county would be set up on the lower Genesee, so were the proprietors across the river, and in 1817, when Elisha Johnson prepared a street plan for that area, it likewise included a Court Street and a spacious court square, though again the principal streets tied in fairly satisfactorily to the highway from Pittsford, which was named Main Street and led to the bridge.

The pioneer residents themselves recognized no sharp divisions. When in 1813, Francis Brown was ready to raise the timbers for a large house, the first three-story structure in the settlement, 100 men gathered from all parts of town to lend a hand. Nathaniel Rochester, when planning a shallow weir dam to catch water above the cascades for his improved raceway in 1816, readily agreed to cooperate with Elisha Johnson in raising it a few inches higher and extending it across the river in order to facilitate the opening of a race on the east bank. The first village charter, secured in March, 1817, included only the west-side improvements and some adjoining lands, a total of 655 acres, but the east-side settlement was omitted only because the boundary between Ontario and Genesee counties followed the river. A few months later, when Johnson was ready to blast rock for his east-side raceway, the entire community rallied to his aid and made the blasting operation a part of its first celebration of the Fourth.

The town's growth during the first few years was not unlike that of other new settlements which enjoyed advantageous locations. Perhaps the triple character of its promoters engendered a competitive enterprise, for three sawmills were soon in operation, one on each tract. Although the War of 1812 retarded settlement, the abundant supply of boards quickly enabled the pioneers to move their original cabins to the rear of their lots where they served as stables or sheds, making room for more substantial one- or two-story frame houses and shops. Colonel Rochester himself contracted for the erection of several such houses, some boasting four rooms on two floors, each equipped with double fireplaces, at a cost of \$300 a house. Frequently the builders accepted a lot or some lumber in payment, while plasterers and painters were glad to work off their rent for a few months by finishing up the houses they occupied. In fact the chief problem facing newcomers was to find shelter, and many camped for a season or two in covered wagons. The hundred or more houses of 1816 increased to around 250 within two years without satisfying the growing demand.

An abundance of building stone, found loose in the river and at numerous outcroppings on all sides, provided suitable material for chimneys and fireplaces. When Brown's mill was destroyed by fire in 1818, it was quickly replaced by a four-story stone structure, again the largest in the settlement, constructed of grey limestone from outcroppings in the area. Other stone mills soon appeared, both at the main falls, where Brown's race was now completed, and along the two upper

races south of the bridge. The first brick yard was opened, but wood continued to supply the principal building material, even for the half-dozen most substantial houses, with eight or more rooms each, which the more ambitious settlers erected at advantageous sites about town. The first two church buildings, the school house, the first four taverns and practically all other structures were likewise of frame construction. Records of local architectural tastes are unfortunately lacking, for the pioneer village was soon swept entirely from view by the booming canal town that displaced it.

Boardwalk Days

Not only did the Erie canal bring new vitality and unprecedented growth to Rochester, it likewise altered the town's character and reshaped its physical pattern. The effect on the rate of growth became apparent shortly after the state surveyors had definitely chosen Rochester for the Genesee crossing, and it was in the ten years succeeding 1818 that Rochester's growth reached the unprecedented rate of 804 per cent. A new boom-town pattern was thus elaborated, with its inevitable introduction of jerry-built structures among more substantial buildings. The experience, however, was so new and so short-lived that Rochester escaped some of the speculative excesses of later boom towns, while its continued if more moderate growth during the thirties and forties provided a firm demand for stable construction and reconstruction. Yet the Flour City, as it was proudly known, remained a boardwalk town about which only the cartmen and a small group of carriage folk ever bothered to ride.

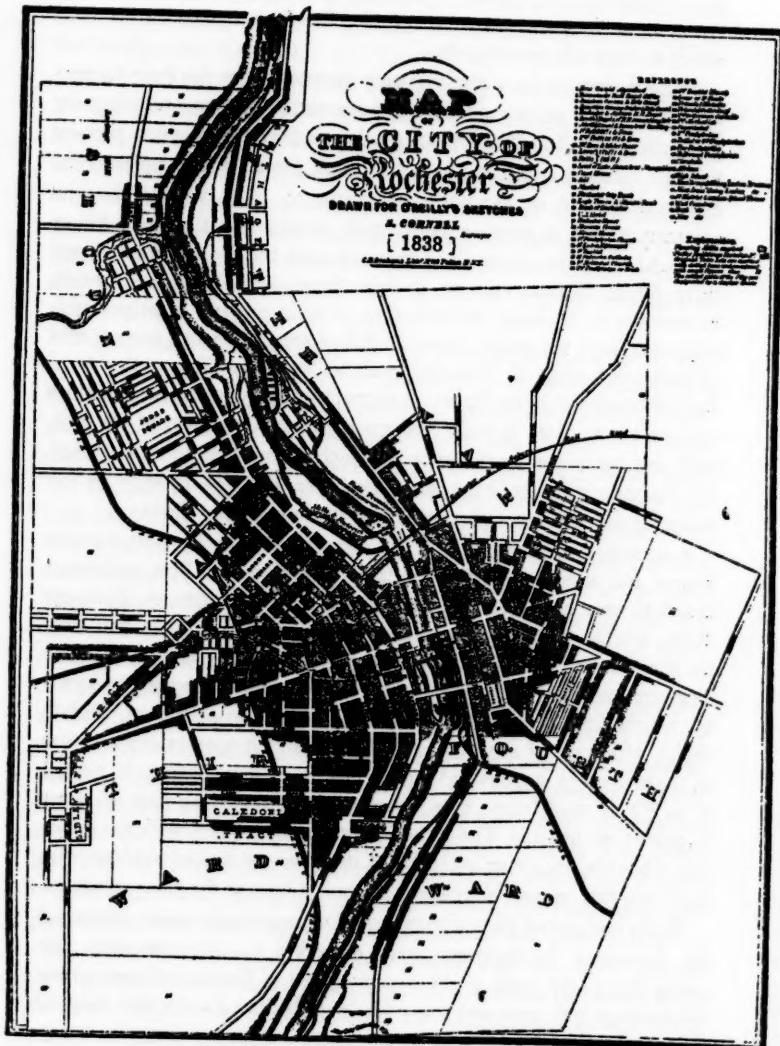
The most impressive structure brought to Rochester by the canal was of course the aqueduct which carried the Erie across the Genesee on eleven stone arches. Some of the first canal boats to arrive in 1822, three years before the Erie was completed throughout, brought not only facing stone for the aqueduct but hewn stone from Auburn for the new St. Luke's Church and white Sweden stone for decorative use in the first Presbyterian church. Stone masons were in demand at several other construction jobs in the early twenties, including of course the first court house, built in 1821, the year Monroe County was organized. The first all-brick structures likewise appeared at this time, chiefly around the Four Corners, now definitely the center of town, for the annexation of East Rochester (as it was called) in 1823, bringing the total acreage up to 1000, and the southern location of the aqueduct fairly evenly

balanced the developments around the main falls and at the lake port further north.

The canal brought new economic functions as well. Canal slips or basins were required, and several were quickly dug, chiefly west of the river, spurring the building of warehouses and shops near their docks. The mill yard (back of the mills on the Rochester, Fitzhugh and Carroll race) was appropriated for Child's basin, the principal boat harbor in town, and Mill Street became Exchange Street as a row of shallow stores and exchange houses sprang up between it and Child's basin. Lumber yards developed between the feeder and the canal on the east side, and boat yards were established at several points along the canal; indeed Rochester's sawmills made it the leading boat building center on the Erie. The village blacksmiths on Buffalo Street moved their shops to the banks of the canal where iron ingots and other metal supplies as well as fuel could be unloaded more easily; soon a number of small foundries and machine shops were clustered on the west side of town where Buffalo Street crossed the canal.

The town's growing importance prompted a total reconstruction of the properties along the principal business streets. Two unusual structures built at this time gave a special character to the city. The first was the public market which, though not in itself a notable structure, was erected in 1827 on piers at the northwest corner of the main bridge—the only site available near the center of town—and thus supplied a precedent for the construction of a row of small wooden shops stretching across the river along the northern edge of the bridge. Another half century would pass before the south side was also boxed in, but here a link was being forged between the east and west sides which would ultimately permit the principal business interests to move across the long forgotten river barrier.

The market was chiefly important for its incentive to a long-range bridge development, but Rochester's other unique structure, the Reynolds Arcade, became a significant part of the community from the start. This four-story brick building was designed with an arcade leading through the center from Buffalo Street in front to Corinthian Street (as it was later called) in the rear. Numerous shops opened into this arcade from each side on the first floor, while a balustrade guarded the edge of the narrow platform that gave access to the offices on the second floor. A skylight running the full depth of the building on the top floor sheltered the arcade and gave it an impressive appearance. The location of the



post office in one section on the ground floor served to attract practically every business man in town to this busy concourse at least once a day. An observatory lantern on top afforded the best vantage point from which to view the growing city.

Property owners for a block in each direction from the Four Corners were now busily replacing the second generation of frame buildings by brick structures. The Watts block on the southwest corner was perhaps the first brick building in 1821; the Eagle Hotel, which replaced the Ensworth Tavern on the northwest corner in 1829, boasted the best accommodations in western New York, though the Rochester House on Exchange Street overlooking the canal and the United States Hotel three blocks further west on Buffalo Street, both likewise of brick, endeavored to challenge its leadership. A solid phalanx of brick buildings soon lined the north side of Buffalo Street for two or more blocks and extended north on State and south on Exchange. The south side of Buffalo Street was more broken in formation, partly by the Court House with its roomy plaza in front, and partly by what remained of the mill-yard near the bridge, in the center of which a large circular water trough and fountain still served the numerous horses that now brought an unending stream of carts and wagons into the busy central district.

A scattering of brick blocks, frame rookeries, one- and two-story frame houses and shops lined the streets in all directions. Five additional churches were erected during the twenties, two of them on Fitzhugh Street, which, with St. Luke's and First Presbyterian, thus had four churches as well as the school, while it shared the Court House and a Temperance Hotel with Buffalo Street. State and Exchange Streets attracted the first theaters and first banks, one each in both cases. Buffalo Street, with most of the stores and the shops of numerous artisans, was so churned up by wagons and carts that loads of gravel had to be hauled in to fill its mud holes; thus commenced the unending task of street improvement in 1836. The authorities were still content with the building of boardwalks along both sides of the other streets, but residents who neglected this responsibility faced increasing fines as the years advanced.

While the central part of town was thus acquiring a more substantial air, important developments were occurring in other sections. The gently rising land south of the canal and west of Exchange Street, where the drainage was good and the wells fresh, became the favored residential area. Screened as it was by the canal from commercial invasion, many elegant homes were built there, some in the Classical or Greek revival

style, which helped to give the Third Ward an atmosphere of refinement. The first private schools for girls were located there in the thirties, and the Fitzhugh Street churches were only a short step beyond the original foot bridge over the canal.

Other and less favored wards, of which there were five in 1834, saw the rapid construction of a miscellaneous assortment of houses and tenements. Fortunately most of the latter (put up during the boom to accommodate the many newcomers who could not afford to buy or rent a house) were located near the center where their flimsy frame construction destined them to early demolition, but several hung on for decades, a constant fire and health hazard, as the community frequently discovered, notably in the latter case during the cholera epidemics of 1832 and 1848.

East of the river the building of two fine churches, one on St. Paul Street and one on Clinton, and the construction of several comfortable homes on these streets gave this section a wholesome residential character. Business was nevertheless climbing the hill east of the bridge, establishing Blossom's Hotel and numerous shops along Main Street. The construction in 1832 of a horsecar railroad north along the river bank from Main Street to Carthage, the east-side landing for lake boats, stimulated commercial developments at both ends and gave rise to a small settlement of Irish cottagers known as Dublin north of the falls. These first suburbs were included within the city when the first city charter extended the boundaries in 1834 to encompass a total of 4,819 acres, much of it still uncleared forest land.

The building of the first steam railroads in 1837 and 1840 scarcely affected these trends, though the selection of the route through the city was to have considerable influence later on. The fact that these railroads, when linked together in the mid-forties, cut across the city several blocks north of the principal Main and Buffalo street artery, crossing the river at the brink of the main falls, provided in effect a northern boundary for the commercial district. When the first station was located at Mill Street with easy access from State Street, the commercial importance of State Street was of course stimulated and grew in time to rival that of Exchange and Buffalo Streets. But the more gradual development of the railroad as a freight carrier, when contrasted with the canal, helped to moderate Rochester's second period of growth at the same time that it contributed a measure of stability to its physical evolution during the forties.

Some stimulus was contributed by the railroad to the industrial area around Brown's race, north of the station, and to the industrial area located on the canal near the point where the railroad crossed it in a high covered bridge at the western edge of town. A spur of track served these firms, one of which erected a large Novelty Works, the largest factory in town during the late forties. The building of the Genesee Valley Canal in the late thirties, which joined the Erie at about this point, heading south back of the Third Ward, never brought a great volume of trade, but such stimulus as it afforded was applied in this area and helped to attract new industries, such as the carriage factory which James Cunningham rebuilt there in 1848 after a fire had destroyed his earlier establishment.

Another industry which had meanwhile located at Rochester was already exerting a wholesome influence on its physical character. A group of nurseries had begun to develop on the city's outskirts around 1840 and within a decade they had practically ringed the city with fields of young seedlings and blooming flowers. Few permanent structures were erected, but a great incentive was given to the cultivation of flowers and arbors in private yards, and the separate, free-standing home gained a popular favor it was never to lose in Rochester.

Some more prosperous residents, well able to afford a horse and carriage, were now prompted to erect sumptuous mansions on the outskirts. The Third Ward, closely bounded by the river and the two canals, was already too crowded for such estates. The newly favored sites were north of the city overlooking the river gorge, particularly along the lake road extension of State Street, or west of the two canals on Buffalo Road where the town cemetery had been located in the twenties, or to the east on the road to Pittsford, soon renamed East Avenue and destined to become the fashionable avenue of the next period. Plank road companies were organized in the late forties to expedite traffic on each of these highways and on the road to Henrietta and points south which led past the new city cemetery acquired on Mount Hope in 1836.

Thus Rochester, with its built-up section spreading out approximately a mile in all directions from the Four Corners, was served by a group of highways that branched off to all points of the compass. Intimate and easy contact was maintained with the surrounding countryside from which its grain, lumber, wool, and hides were drawn, and to which merchandise from the east and its own shoes, clothing, and nursery products were distributed. Rochester at the mid-century, with the

natural beauty of its river and gorge still unmarred, with the ever colorful life on the canal and early railroads adding an exciting bustle, with a more wide-spread enjoyment of private family residences than any city of the day afforded, could not help but attract the lively admiration of all visitors.

Horse and Trolley Days

Fortunately the establishment of a horsecar system in the early sixties antedated the renewed physical growth that began towards the end of that decade. The new facility made it possible to extend the residential radius and thus avoided the crowding of hosts of newcomers, attracted by the shoe and clothing industries, into downtown tenements. As the first traction lines reached out approximately two miles north on State and Lake, west on Buffalo, and south on Exchange and Mt. Hope, with a shorter loop east on Main to Alexander and Monroe, new residential neighborhoods sprang up on all sides. The commercial and industrial effects of the steam railroads were likewise beginning to reach out at various points. To encompass these and other expansive movements, the city's boundaries were pushed out in 1874, more than doubling the area under municipal control.

Most of the new residential neighborhoods followed a happy design of the fifties. Small houses and cottages, some in the new Gothic style, dotted the outlying streets. They were encroaching at several points on the nursery fields, and in at least one instance the nurserymen found it profitable to subdivide an old tract and build story-and-a-half cottages which sold at \$1500 each. Building lot associations were formed to promote subdivisions, and in 1872 ten of these had 2652 lots for sale, one third of the total ready for development. Most of the houses were contracted for individually, but a few builders, such as Simon Rosenblatt, erected as many as thirty-five in one season.

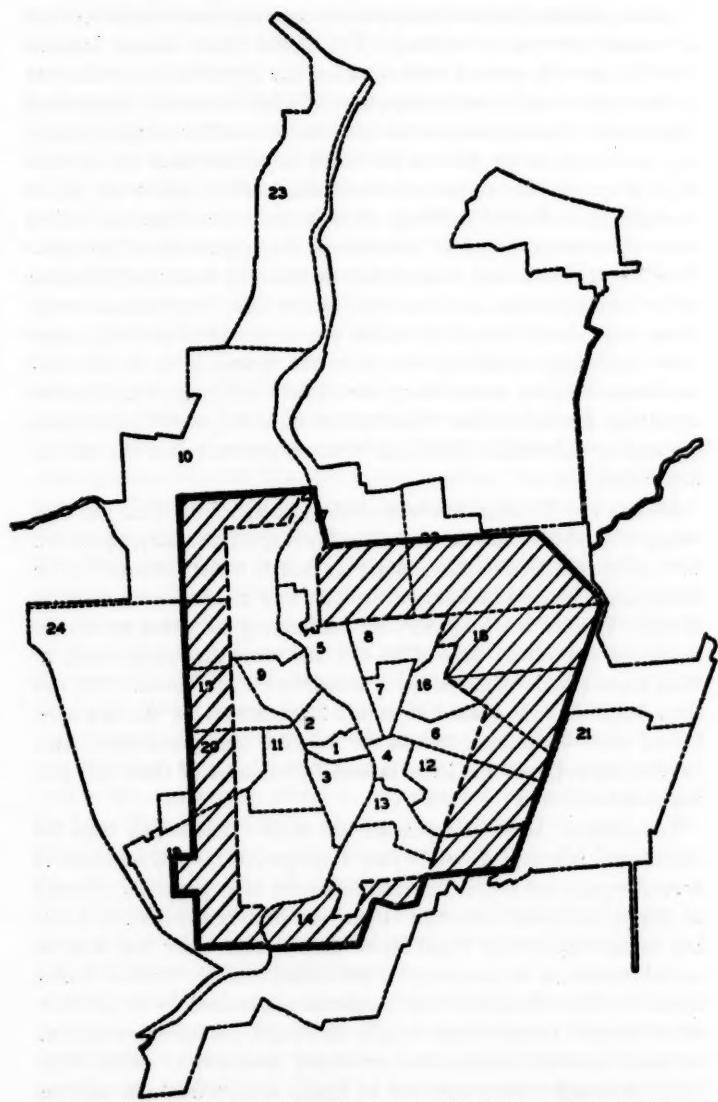
Most of the subdivisions followed the standard pattern, locating their houses on forty- or fifty-foot lots along residential streets extended without imagination from older sections. A new pattern was, however, provided when Sibley Place and Arnold Park, off East Avenue, and Oxford Street, off Monroe, were laid out in the seventies, each with a central park strip decorated with flowering shrubs separating the two driving lanes which were open at first only at one end. Lot buyers in these and a few other areas had to agree to build houses costing \$7000 or more, and some mansions valued up to \$20,000 were erected on East Avenue, Mt. Hope, West Avenue beyond Bulls Head, and on Lake

Avenue north of the city limits. While the profusion of shrubbery and monumental statuary and the architectural eclecticism which characterized these sumptuous estates were far beyond the means of the average home seeker, most of the streets now boasted shade trees, and the newly introduced lawnmowers could be heard on all sides.

The city's renewed growth following the Civil War speeded a third reconstruction of the central business district. This process had in fact been more or less continuous as frequent fires and occasional floods damaged one part or another of the now solidly built-up area. Old Main Street bridge had been replaced by a stone arch structure in the mid-fifties, and the outmoded frame structures lining its north side were removed, partly by fire and flood, to give place to three- and four-story brick stores, mounted as before on extensions of the bridge piers. The south side of the bridge was likewise provided with a row of brick buildings in the early seventies thus finally shutting off all view of the river from Main Street East and West (as Buffalo Street was now renamed).

Brick and stone had long since replaced wood in the downtown area, now solidly built up to three and four stories for several blocks in all directions from the Four Corners, but in the absence of a water system even the best structures were by no means safe. It was this situation which prompted Daniel Powers to turn to cast iron in the late sixties when he began the construction of his great block at the Four Corners. It was built almost entirely of cast iron and glass and extended completely around the northwest corner lot (which had been priced at \$200 only fifty years before when a solitary log cabin stood there, the first in Rochester). When completed in 1871 to a height of five stories, with a mansard roof housing a sixth story over the corner section, its value was placed at \$500,000, and curious Rochesterians flocked in to enjoy their first stroll through marble halls and their first ride in a "vertical railroad."

Other downtown realtors felt the urge to modernize their properties, but many hesitated until the city, alerted by the Chicago and Boston fires, finally undertook the construction of a water works in the mid-seventies. Immediately, a large-scale reconstruction of Main and State Street properties commenced, and when several nearby structures overtopped the Powers Block, Daniel Powers ordered his architect to add a second and then a third mansard roof and finally raised an observatory tower which continued to command the highest point on the Rochester skyline until the end of the century.



OUTLINE MAP OF ROCHESTER'S EXPANDING BOUNDARIES
The shaded area indicates the territory annexed in 1874. After several late annexations the outer boundaries reached the limits shown here by 1926 and have had only minor alterations since that date.

An important aspect of the downtown reconstruction was the erection of several new public buildings. The second Court House, built in 1850-51, stood its ground until 1894, but the city officials, crowded out in the early seventies, built a separate City Hall on the site of the First Presbyterian Church burned a few years before. A Free Academy building was erected at this time on the school lot on the other side of Fitzhugh Street. A state arsenal, a reconstructed county jail, a city police headquarters, a Federal Building, all appeared in these years, as well as three new theaters or public halls, two of these again east of the river. Except for old St. Lukes, most of the churches had to be rebuilt because of fires or other causes, and a tendency to withdraw from the commercial center was evident, though the moves were only a block or two in most cases. Additional churches were of course springing up in the new residential districts, where many new school buildings were likewise appearing. Several of these first frame chapels and school houses were replaced by substantial brick and stone structures before the end of this period.

Instances of the latent east-west rivalry also appeared. Thus the University of Rochester and the Rochester Theological Seminary, opened in 1850 in the old United States Hotel on Buffalo Street, removed in the sixties into their own buildings at separate sites on the eastern outskirts of town. The first two hospitals were built during the sixties on Buffalo Street near the western edge of the city, and while the first of these, St. Mary's, was rebuilt on its old site at Bulls Head after a fire in 1891, two other hospitals were opened in remodeled mansions on the east side. Several other institutions, such as the Reynolds library and the various social clubs, followed the latter makeshift, but most of them still preferred the west side.

The areas of industrial expansion had by this time swung from the canal to the railroads. A freight yard developed on the southern half of Brown's square and attracted several industries to its periphery, creating an almost continuous industrial swath west from the old Brown's race area to and beyond the Canal Street district. That street had been so named because of its proximity to two canals, but the Genesee Valley Canal was now abandoned and a railroad constructed in its old bed, which brought a much larger volume of freight, particularly coal, into the area, seriously blotting the residential prospects of West Main Street. Although water power was no longer so essential to its welfare, the industrial area around Brown's race was now thriving and began

to extend northward, while east of the river several breweries began to appropriate sites on the old Falls Field, long the favorite picnic area, where circuses had camped for innumerable seasons. Bausch & Lomb had moved to the northern edge of that field in 1874. A new railroad was pushing into these areas from the north, just as others were coming into the city on both sides of the river from the south.

The enthusiasm with which these latter railroad developments were greeted, except by a few residents in the immediate vicinity, failed to take thought of the morrow. The two or three trains that steamed in daily along these single-track lines seemed at first to add a touch of drama to the river scene, but as freight sidings, coal yards, and other industrial features developed, the city's once-beautiful river vistas were blotted from view. Only in one case, during the building of the Rochester and State Line Railroad (now the Baltimore and Ohio) did the community rally to protect its total interests and compel the railroad to secure a right of way closely parallel to the New York Central's tracks entering from the west. The effect was to enhance the rail facilities of the Canal Street area and to extend that industrial center further west. Meanwhile, east of the river and beyond the city's eastern limits, the New York Central was itself developing a new freight yard in the early seventies, attracting thither several industries then in need of room for expansion, including a lumber yard and the Rochester Car Wheel Works. Back in the older industrial centers, just south of Main Street, the flour mills, finally declining in number, gave place to printing firms and electric power plants, more appropriate to the time and place.

Fortunately, as Rochester's growth persisted, several obstacles to further expansion were eliminated. One great barrier to expansion, particularly in the northeastern direction, was removed with the elevation of the New York Central tracks in the early eighties. The speed of the trains had made crossings hazardous, except at St. Paul and State Streets near the station, but with the elevation of the tracks, horsecar lines were promptly extended into this area, facilitating its rapid development by hosts of newcomers from foreign lands, among whom the building and loan associations were especially popular.

Another obstacle to east-side expansion had been the city's failure to develop an adequate sewer system. The old surface sewers had been outmoded by the introduction of a water system and the consequent multiplication of inside toilets. The first sanitary sewers west of the river drained easily into that artery and, when dumped into the gorge below,

the main falls, could be forgotten for a time. But a half mile east of the river the land drained naturally towards Irondequoit bay several miles further east, and the practice of terminating the sewers in open ditches at the city limits inevitably discouraged settlement. It was not until the east-side trunk sewer was completed in the nineties that this situation was rectified and a healthy development of this region made possible.

The extension of the horsecar lines in many directions during the eighties and their electrification in the early nineties, coupled with a similar extension of gas and electric and telephone services, and the building of three new bridges, making a total of seven over the river by 1890 besides many over the canal, helped to spur the growth of residential neighborhoods on all sides. The new housing, now generally equipped with sanitary and other conveniences, commanded higher prices, but the development by several banks and other credit institutions of a more generous practice of extending long-term mortgages at reasonable rates enabled Rochester to maintain the diffusion of home ownership—at least partial ownership—that had won it so much favor in earlier years.

Fortunately the city took another wholesome if tardy step in 1888 when the public park system was organized. The industrialization of old Falls Field and both sides of the river gorge north of the falls, as well as the river banks south of the canal, sacrificed these ideal park sites and compelled the Park Commission to look further north and south for suitable river tracts. Although the sites finally selected, including the cluster of highlands south of the city, were at the time considerably beyond the area of settlement, the extension of trolley service to their borders made them more accessible during the nineties. In another decade their horticultural and recreational developments would become the city's chief pride and joy.

This widening growth, together with the elevation of the railroad tracks, prompted a new reorganization and partial reconstruction of the central business district. The New York Central in rebuilding its station on higher ground had decided, against outspoken local protests, to move its site to the east side of the river where St. Paul Street became its most convenient approach. A sudden check was applied to the development of State Street's commercial properties, and the fashionable shopping trade was pulled eastward over the bridge on Main Street to St. Paul and Clinton Streets. The Four Corners was not so easily superseded, but the

twelve-story Granite Block, of steel frame construction, appeared at the Main and St. Paul intersection only five years after the Wilder Building, birthplace of the Cutler mail chute, had been the first in 1888 to achieve eleven stories at the old Four Corners.

Vertical construction was still less convenient than spatial diffusion, however, as the appearance of several small nuclei of retail stores on outlying streets indicated. Curiously enough, most of these pioneer shopping centers developed at intersections where an early tavern keeper or grocer had established a water trough. Thus the points at which farmers and cartmen and carriage folk had watered their horses became the centers of new shopping districts—which reminds us that Rochester was still in its horse and buggy days although the bicycle and the electric trolley were already heralding a new era of physical growth.

Metropolitan and Suburban Trends

The vitality which brought a building boom in the early 1900's was already apparent in a group of highly specialized industries whose rapid development commenced in the nineties. The industrial aspects of this story are outside the scope of this paper, but it is necessary to note where the new factories located and what effects this had on the city's physical evolution. Moreover these local industries were but representatives of a modern mechanical age which brought the automobile and many other highly significant conveniences to Rochester, greatly transforming its life patterns and enforcing many new structural changes. We are still in the midst of this period of physical reorganization and growth, still hopeful of finding our way forward to more agreeable solutions of its perplexities.

A major construction job of the new era was the building and maintenance of more durable highways. Rochester had found a fairly suitable material for its heavy traffic streets in the medina block paving first introduced during the fifties, but it was very costly and hard to keep clean. Macadam surfacing had sufficed on most residential streets until asphalt proved its superiority in the nineties, but again its cost presented a deterrent until the coming of the automobile in the early 1900's made it imperative that relatively smooth and durable surfaces be maintained on all principal streets. The rise of the good roads movement at this same time extended these highways out to distant villages and spurred the establishment of suburban communities near the new industrial tracts which now became important.

The renewed march of industrial migration might be dated from 1890 when George Eastman erected his first building at Kodak Park, just north of the city limits on the west side. The expansion of his plant on State Street was by no means completed, but the park tract, which began with a nucleus of 21 acres and grew to 476 by 1950, ultimately became the major concentration of the company's effects. A similar migration beyond the city limits occurred with the industrial development of Lincoln park west of the city at the point where the New York Central and the State Line Railway drew together and each sent branch lines off to the north towards Kodak Park and the lake port. Still another industrial concentration occurred in the east along the New York Central beyond Culver Road, then the city's eastern boundary. While these migrations may have been influenced by a desire to avoid city taxes, they were certainly justified by the need of the various companies involved for ample room for expansion. Moreover the city inevitably benefited by the wider dispersal of its industrial areas and generally secured more efficient and attractive factories than could possibly have been built in the congested inner district. Even the old clothing and shoe factories began to move out to new and more airy plants during the early years of the century.

Just as the city's industrial expansion antedated the building boom, so also did the wave of population growth gather full intensity in the later eighties long before builders began to supply adequate accommodations. There was as a result great overcrowding in older sections. Most of the upper stories over downtown stores and shops were used as makeshift residences, often housing many residents in a room or dormitory. Public health officials uncovered some of these conditions during an epidemic in 1893 and again in 1898. Dr. George Goler, the city health officer, was repeatedly invited in the early years of the century to give his lecture on "How Some of the People of Rochester Live." The public became aroused as the facts about congestion in the tenements on Front, Court, Union, Scio, Baden, Joseph and other streets came to light. The Chamber of Commerce appointed a committee to study the community's needs and propose a solution. A site for a low cost housing development was sought, but nothing was accomplished.

Strangely enough, a building boom was mounting throughout this early discussion of Rochester's embryonic slums. From 1898, when city-wide construction statistics were first reported, the building operations in Rochester mounted steadily from \$1,394,000 to nearly ten times that

sum by 1912. Every year but two showed a positive increase, and, although the figures included industrial and commercial construction, the number of new homes added annually likewise increased from around 300 at the start to 2000 at the close of the period. Nevertheless, as in 1905 when 955 residential units were built, sufficient to accommodate 5000 people, a reporter noted that this barely accounted for the population growth of the year and did not relieve existing shortage. The need, according to the Chamber's secretary in 1905, was for houses to rent at \$2.50 or \$3.00 a week, at most \$15 a month; mechanics and artisans, as John C. McCurdy put it a year later, could not afford the houses offered at \$25 and more a month. Yet the Building and Loan Associations could not maintain even the \$25 figure five years later. Municipal and cooperative housing were both proposed though not seriously considered. Instead, a number of new tenements and apartment houses were erected, until by 1910 about 10 per cent of the city's dwelling units were flats, but again the rents were too high. George Eastman, a member of the Chamber's committee and eager to meet this problem for his own as well as other workmen, headed a move in 1912 to erect a model tenement at State and Frank Streets. But the plan to house 200 families there called for slightly smaller rooms and fewer fire escapes than the city's building code permitted, and, after a heated debate in pulpit and press, Rochester refused to modify its standards, which indeed had been seriously indicted, when adopted in 1910, for permitting any tenements in the city of homes.

Standards were meanwhile rising in some of the better residential sections where the old gridiron pattern was frequently modified to take advantage of a hill or a row of trees or even to introduce a circle or crescent. Browncroft, laid out on an old nursery tract on the eastern outskirts in 1915, made perhaps the most determined effort to achieve a park-like effect, but other fine neighborhoods were projected in the southern, western and northern sections of the city as well. Too much of the building lacked architectural distinction, one critic complained, admitting, however, that the freak architecture of former years was now out of favor. The contrasts between the better and the poorer districts appalled several observant visitors and thoughtful citizens, but interest in these problems was diverted when the First World War checked new residential construction.

Although the city's rapid growth brought many new changes to the downtown section, one of the most urgent was never effected. The

biggest problem there during the first decade of the century was the traffic congestion. Solid rows of trolleys frequently blocked all cross streets from the Four Corners east to Clinton Avenue, and the shouting cartmen did not help the one or two inexperienced policemen who tried vainly to break the bottleneck, as the situation was here first described. The repeated efforts of the trolley company to divert some of its cars from Main Street brought only temporary relief, for passengers quickly shifted to cars that followed its course. A proposal, made a decade before, that a street be opened through the downtown district, parallel to Main Street, was now revived and became a central feature of several proposed city plans. Unfortunately it was impossible to decide between a northern and a southern parallel, and since the city could not undertake both, neither was built. Not until automobiles began to replace hacks and carriages and delivery trucks in the second decade, thus speeding the flow of traffic and making it more flexible, did the crisis subside, and then only for a decade or two.

Several striking new buildings appeared in the business district during these years. Two new hotels were built in 1907, the Rochester on West Main, and the Seneca just off East Main on Clinton. Three new department stores were erected, two east and one west of the river. The great Granite block fire of 1904 spurred its occupant, the Sibley, Lindsay and Curr store, to remove to a new and more spacious site a long block further east. This huge department store, opened east of Clinton on Main Street in 1905, was but one of several that soon appeared, transforming the downtown shopping scene. Instead of scurrying from one store to another throughout the commercial district, many shoppers now found all they wanted under one roof. The result was not so happy for the smaller storekeepers, and many empty or neglected store fronts could be seen along the nearby side streets. A similar blow was received by the owners of these properties when their upstairs offices were vacated by tenants moving into the new towering office building on Main Street. Two more arose at this time; one on East Main making two at the St. Paul corners, but the west side gained a new one, too, the biggest of all, though not at the Four Corners: the 16-story Kodak office building erected on State Street in 1913.

These new "vertical streets," accepted symbols of urban advance, checked the zeal of realtors for a parallel street. But the blight which their shadows and those of the big stores cast over neighboring properties hit the owners harder than the renting merchants. Many of the

latter now moved out to the sub-shopping centers, which began to grow until they comprised long ribbons of stores lining one or both sides of most of the principal highways of an earlier period. Many of these stores opened at first on the ground floor of existing residences, to which, as trade prospered, make-shift store fronts were added, generally reaching out to the sidewalk. Occasionally a new store building was erected, or a block of stores two or three stories high, with shops or flats above. For a time many of these sections retained a pleasant atmosphere, but as the rush of traffic increased and the streets were widened and paved, the shade trees came down, revealing the stark ugliness of the facades of stretches of Monroe, Plymouth, West and East Main beyond the central district, Lyell, St. Paul, Clinton, North and many lesser streets.

When a new if short-lived building boom developed after the First World War, it was confined in Rochester chiefly to high cost construction. Several of the better residential neighborhoods opened during the previous period were now filled with comfortable homes which sold at peak prices, ranging from \$10,000 up. New tracts were laid out and improvements installed, though most of them lay undeveloped during the depression that followed. It was in the lush twenties that the generosity of George Eastman enabled the University of Rochester to establish and build its new men's campus on the river, to erect a medical school and hospital near by, and a music school and the Eastman Theater downtown. The Theological Seminary likewise moved at this time to a new and admirably equipped campus on the city's southeastern outskirts. Five additional skyscrapers arose, each ten or more stories high, while three more floors and a tall pinnacle roof raised the Kodak Tower to a new and commanding height. A new east-side hotel, a new and well designed Central station, and several other large blocks appeared in the downtown section before the depression halted construction.

Most of the newly rehoused enterprises survived the succeeding hard times, but the deterioration of side-street properties was accelerated. A few owners pulled their buildings down to escape taxes, and when it was discovered that the empty lots netted unexpected returns as parking lots for the steadily increasing invasion of automobiles, still more old buildings were pulled down. Finally most of the business district became seriously pockmarked with empty lots—only Main Street escaped the blight, and in its case only for a distance of seven blocks.

But Main Street, too, had its empty stores, even one of its big department stores, for the Duffy-Powers store on the west side had closed

during the depression and failed to reopen with the slow recovery of trade. The fashionable shopping district had now definitely moved eastward and the busy four corners of this period was at Clinton and Main Streets. The old Four Corners retained its dignity, however, as a bankers' and lawyers' stronghold.

The traffic congestion, relieved at first by the automobile, was again becoming unmanageable, despite the introduction of a traffic light system in the twenties. The construction of Broad Street in 1922 as a deck over the abandoned Erie Canal through the downtown section failed to divert much traffic from Main Street. The subway, built in the canal bed as the decade advanced, accommodated the big inter-urban trolleys for a time, but never attracted a major portion of the inner-city traffic. A measure of relief was later secured when the transit company replaced its trolleys with buses, greatly speeding the flow of traffic, but as the number of buses and private cars continued to mount even the elimination of street parking during rush hours failed to solve the problem. Perhaps the projected inner loop, promised as a feature of the state thruway system, will supply a formula that will save the business district from self-strangulation.

The depression years had brought building operations in Rochester almost to a standstill. A fine new central library and a museum building were erected but fewer dwelling units were built in the decade of the 1930's than in a single season a few years before. While the city's population now for the first time showed a slight drop in numbers, congestion in the less expensive areas actually increased and, together with the cessation of repairs, speeded their deterioration until the long threatened slum developments became a reality. Successive city administrations and Chamber of Commerce committees studied the problem, and a Better Housing Association was formed, but nothing was accomplished until after the Second World War, when the returning veterans added a new urgency to the housing shortage. A group of public-spirited bankers now took the initiative and erected Fernwood Park, a non-profit housing project designed to supply veterans' families with reasonable but attractive apartments. Two similar projects were erected and several temporary housing units were set up without fully meeting the demand.

Rochester gained wide praise for these earnest efforts, but it gradually became evident that neither these philanthropic ventures nor the renewed enterprise of home builders on the city's outskirts offered a solution for the growing slum problem in such areas as the Baden-Ormond

district north of the tracks and in other blighted sections at various points around the central business district. The earlier practice of converting over-age residential properties to commercial and industrial use no longer worked, for industry was now migrating to undeveloped tracts on the outskirts while commercial enterprise was being concentrated more and more in a few large department stores and in extensions of outlying shopping districts. Finally it was agreed that only a surgical operation would suffice, and part of the Baden-Ormond slum has been condemned and cleared for a modern public housing project, now under construction.

The results of this new attack on a very old problem are still to be seen. Meanwhile, on the city's outskirts, new housing developments of many kinds were springing up. From Cape Cod cottages to ranch houses, the buyer had a wide choice in styles and in prices, though the latter began at \$8,000 and rose rapidly. Houses for rent were not so numerous, but to meet the needs of those able to pay good rents, several large apartment house communities were built on undeveloped tracts beyond the city limits, thus greatly increasing the density of the surrounding towns. The old practice of annexing such tracts shortly after development started has, however, been abandoned. Most of the towns have now provided their own water and sewer systems—the chief argument for annexation in earlier days—while the Rochester Transit Company has eagerly sought their trade. With the city's more wholesome residential districts almost fully occupied, most of the future physical growth of Rochester will occur in the suburbs, yet a check of the actual construction of the last six years reveals that Rochester led all but Irondequoit in number of new homes built, 2,529, which was more than the total for the 15 years previous. The total for the city and four towns was 11,000 single homes and 6,000 apartments in six years—a rate of growth which approaches that of the early 1900's.

This renewed residential expansion had of course been sparked by large additions to the city's industrial plants, much of it during the latter years of the war but continuing into the post war period. Most of the new construction in this field occurred on lands adjacent to the railroads thus tending to fill in and extend the bands of industrial activity of an earlier day. Most important were the industrial tracts that lined both sides of the New York Central as it cut across the city from east to west. The Central's spur line north from the west side to Kodak Park and the lake port now served a fairly continuous string of factories, while the

industrial strips on both sides of the river gorge reached further north. Few new factory developments occurred along the southern reaches of the river. The subway and freight service in the bed of the abandoned Erie proved a greater boon than the old canal to several new industries on its route in the northwest part of town, while the new Barge Canal nurtured a cluster of gas and oil tanks on the southwestern rim of the city.

An important result of the evolving pattern of Rochester's industrial districts has been a division of the city's residential areas into seven more or less isolated neighborhoods. This situation has been most clearly revealed in an excellent study of "Public Recreation [facilities and needs] in Rochester" by the City Planning Commission. If adequate playfields and parks can be developed in each of these areas, as the study proposes; if school and other institutional facilities can be provided; if the shopping districts can be improved and areas of residential blight and industrial intrusion removed, Rochester may yet regain something of the wholesome small-city neighborliness for which it was noted a century ago. This of course is more important than the sheer size of physical growth, more important than the achievement of exterior beauty. Yet none of the three is incompatible with the others, and Rochester has at least an outside chance to achieve them all.

Careful planning will develop and safeguard the seven residential communities and guide the evolution of a half-dozen similar neighborhoods in the surrounding towns. We can advance this cause by clearing out some of our scattered slums to make way for playfields or parks, by replacing blighted sections of the business district with spacious parking plazas, and by removing unprofitable railroads and unsightly enterprises from the river banks, particularly south of Court Street. The projected inner and outer loops and connecting throughways of the joint city and state plan will be a great boon, but they should be carefully landscaped to serve as spacious, tree-lined parkways, not as nerve-wracking speedways. If we can remember that we live as well as work in Rochester perhaps we will be able to find the time and money and foresight to achieve these ends. Certainly this backward glance over the record of our physical growth suggests that an opportunity to harmonize and integrate the city's functions is now at hand.

